Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTES AND COMMENTS

The address of the Secretary of the Society will be "Puget Sound Biological Station, Friday Harbor, Washington" from June 20 to August 15.

COMMITTEE OF THE SOUTHWEST

Last summer preliminary steps were taken by the Ecological Society towards a cooperative study of natural openings or "parks" in the western yellow pine (*Pinus ponderosa*) forests of Arizona and New Mexico. These "parks" are of considerable importance in the forest management of the region. Their cause remains unknown in spite of the attention which has been given them. It has become evident that the problem can be satisfactorily solved only by cooperation, and the Society is therefore endeavoring to bring together those interested in the work. The United States Forest Service and the Carnegie Institution of Washington have agreed to cooperate, thereby making it possible to apply the promising method of soil areation investigations developed by Cannon and Free.

The Fort Valley Forest Experiment Station which is conducted by the Forest Service at Flagstaff, Arizona, is on the edge of a typical park in the yellow pine forest. Here a conference of all those interested in the problem will be held in May or June. All members of the Society who are interested and wish to cooperate, may secure the necessary information from Professor Weese, Secretary of the Society (University of New Mexico, Albuquerque), who is cooperating as zoologist, or from Dr. Forrest Shreve in Tucson, who initiated the project last summer. The following statement by Dr. Pearson in charge of the Fort Valley Experiment Station, who is representing the Forest Service, outlines briefly the work done on the problem prior to the present cooperation:

"This subject has received more or less attention at the Fort Valley Experiment Station in connection with various forest problems, but as yet no serious effort has been made to arrive at an explanation for the existence of parks. All of the studies have been made in the large park near the Experiment Station. This park, which is really a valley or basin, is typical of one class of treeless areas within the yellow pine forest. There is a local distinction between "parks" and "prairies." Prairies are, as a rule, larger in extent and usually they are not lower than the surrounding timbered areas as in the case of parks. The study should cover both types of open areas.

From 1909 to 1913 inclusive, meteorological records, including temperature, precipitation, wind movement, relative humidity and evaporation, were maintained at two stations in the park and one in the forest near the experiment station. Soil moisture and soil temperature records were kept during a portion of the above period. The results were published in 1914.[1] Among the conclusions are the following:

Minimum temperatures are commonly from 10 to 15° F. lower in the park than in the forest.

Wind movement and evaporation are much higher in the park.

The soil freezes to a greater depth in the park.

The snow melts more gradually in the forest.

The above factors are known to have an important bearing upon the absence of trees in the park. Determinations of soil moisture and wilting coefficient (centrifugal method) yielded no definite conclusions. Recent studies, however, indicate that the soil factors are important.

Attempts at artificial reforestation with 3-year-old transplants have been partially successful. The plants make a vigorous growth during the summer, but usually the tops are killed back in winter. Winter killing is thought to be closely related to the deep freezing of the soil. Another factor is the presence of a hard pan which prevents deep root penetration. Hard pan, however, does not occur everywhere in this park, nor is it characteristic of all parks and prairies.

During the past ten years a considerable number of natural pine seedlings have come into evidence in certain portions of the Fort Valley park. Some of these are two or three feet tall, but few are more than three years old. The taller plants exhibit a tendency toward winter killing similar to that observed in planted stock. This form of injury is less common in small seedlings probably because they remain covered with snow during the period when the soil is frozen.

What data have been secured indicate that the conditions most responsible for the failure of seedlings to establish themselves in parks are to be found in the soil. Physical texture as determined by the presence or absence of sand, gravel and stones, appears to be very important. Undoubtedly permeability to water and air is a vital factor. Chemical analyses have thus far furnished no clue, but this subject should receive further attention. Root systems should be examined with special reference to depth of penetration under different conditions."

Pacific Coast Meeting

The Pacific Division of the American Association for the Advancement of Science will hold its fourth annual meeting at Seattle on June 17–19, in quarters to be provided by the University of Washington. The program

---

[1] Pearson, G. A., "A Meteorological Study of Parks and Timbered Areas in the Western Yellow Pine Forests of Arizona and New Mexico." Monthly Weather Review 41: 1615–1629, 1914.